

1 What is claimed is:

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3 1. A dishwasher comprising:

4 a washing chamber;

5 top and bottom nozzles injecting water in the washing chamber;

6 a sump provided under the washing chamber to store the water;

7 a pump pumping the water stored in the sump;

8 a supply pipe adjacent to one side of the pump wherein the water pumped by the

9 pump flows in the supply pipe;

10 upper and lower pipes connected to the supply pipe to lead the water to the top and

11 bottom nozzles, respectively;

12 a valve rotatably installed at a connecting portion between the supply pipe and the

13 upper and lower pipes to selectively open/close the supply pipe and the upper and lower

14 pipes; and

15 a driving means for turning the valve by checking a position of the valve.

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17 2. The dishwasher as claimed in claim 1, wherein the valve has a semi-

18 cylindrical shape so that upper and lower ends are hinge-coupled between the supply pipe and

19 the upper and lower pipes.

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21 3. The dishwasher as claimed in claim 1, the driving means comprising:

22 a motor rotating a rotational shaft connected to the valve;

23 a cam connected to the rotational shaft to rotate together with the valve, the cam

24 having a plurality of sections differing in radius from each other; and

25 a sensing unit brought contact with an outer circumference of the cam to control an
26 operation of the motor.

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28 4. The dishwasher as claimed in claim 3, wherein the motor is a step motor
29 enabling to adjust a rotational angle.

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31 5. The dishwasher as claimed in claim 3, wherein the cam comprises a first cam
32 having a first radius and a second cam having a second radius smaller than the first radius.

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34 6. The dishwasher as claimed in claim 3, the sensing unit comprising:
35 a button brought contact with the outer circumference of the cam to be compressed or
36 restored; and
37 a micro switch turned on or off according to a compression or restoration of the
38 button to control the motor.

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40 7. The dishwasher as claimed in claim 6, wherein the cam comprises a first cam
41 having a first radius to compress the button and a second cam having a second radius smaller
42 than the first radius to restore the compressed button.

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44 8. The dishwasher as claimed in claim 6, wherein the micro switch cuts off a
45 power applied to the motor for a predetermined time on being switched 'on/off'.

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47 9. The dishwasher as claimed in claim 6, the sensing unit further comprising a
48 lever provided between the cam and the button to compress or restore the button by being

49 brought contact with the outer circumference of the cam.

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51 10. The dishwasher as claimed in claim 9, wherein the cam comprises a first cam
52 having a first radius to compress the button and a second cam having a second radius smaller
53 than the first radius to restore the compressed button.

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55 11. The dishwasher as claimed in claim 9, wherein the micro switch cuts off a
56 power applied to the motor for a predetermined time on being switched 'on/off'.